



Land Use Plan for the Western  
Shore of Schwatka Lake



· SCHWATKA LAKE ·  
**AREA PLAN**



March 2015

*Cover Photo: Alistair Maitland Photography 2013*

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# 1. Schwatka Lake Planning Context

## 1.1 Background

Schwatka Lake, located south of Downtown Whitehorse, is a multi-use water body created by the establishment of the Yukon Energy Corporation's hydro-electric dam on the Yukon River. The lake plays a key role in power generation, wildlife habitat, air transportation, tourism, and recreation. Schwatka Lake is also the back-up drinking water source for the City of Whitehorse.

The City has long recognized that managing Schwatka Lake and its diverse uses is a challenge. Development adjacent to the lake has tended to be ad-hoc and, in some cases, unauthorized.

The City has undertaken this planning exercise because:

- Schwatka Lake is the region's primary float plane base and there is a demand for new dock spaces (there are currently 16 float plane operators on the wait list);

- recreational use has increased in the area, both on land and on the water; and
- there is potential for conflict between float plane operators and increasing numbers of motorized and non-motorized recreational boaters.

In July 2013, the City hired Urban Systems Ltd. to help with the completion of this Area Plan for the western shore of Schwatka Lake. This Plan sets out 37 recommendations that will result in improvements to the management of the float plane base, recreation facilities, parking, environmental protection, and commercial opportunities.

The planning area encompasses the western shore of Schwatka Lake from the hydro-electric dam in the north to near the entrance of Miles Canyon in the south. The location of the planning area is shown in Figure 1. Land uses on the eastern side of the lake are not addressed in this study and will be explored in a future process for the planning of the Chadburn Lake Regional Park.

**Figure 1 - Planning Area and Context Map**



## 1.2 Environment

The White Horse rapids on the Yukon River once flowed where Schwatka Lake stands today. In 1958 the river was dammed to generate hydro-electric power and the lake was created. A watershed area of approximately 3,500 square kilometres drains directly into the lake. Riparian, wetland, and forested areas provide habitat for loons, grebes, ducks, and other wildlife. The area is a popular destination for bird watchers.

## 1.3 Heritage

The Schwatka Lake area has historically been used by First Nations and is located within the Kwanlin Dün and Ta'an Kwäch'än Council traditional territories. The area is historically significant also for its role as a water and rail passage during the days of the Klondike Gold Rush. Traces of the Hepburn tramway (constructed in 1898) can still be observed, while tracks of the White Pass and Yukon Route railway (completed in 1900) remain intact, albeit overgrown. The rail operated until 1982, when it was suspended due to a downturn in the territory's mining industry.

## 1.4 Jurisdiction and Land Uses

The planning area supports a number of different activities and uses that are indicated on Figure 2 (next page). Air and water uses are regulated by Federal legislation. The City and Yukon Government have jurisdiction over land uses that occur on the shore and inland.

At the north end of the lake is the Yukon Energy Corporation hydro-electric dam, which produces the majority of Yukon's energy. South of the dam, along Miles Canyon Road, is the float plane base of operations. The City issues annual permits to float plane operators which gives them permission to place a dock at a specified location. In 2014, there were 18 dock permit sites over 1.5 kilometres of shoreline.

There is one private titled lot in the area, Lot 401, at the north end of Miles Canyon Road. This lot is owned by Yukon River Cruises Ltd. and is where the MV Schwatka vessel once operated from. A caretaker residence and storage building are located on the property. On the adjoining shore, the company makes use of a Yukon Government water lot lease that encompasses a paved extension and several docks.

Yukon River Cruises leases the adjacent Lot 402 from Yukon Government to use for storage and parking. A gravel road runs through the lot maintaining access to the shore. There are two docks and two sheds in this location, authorized by Yukon Government to separate operators.

Moving south is Lot 400, which is owned by the City and currently leased to Black Sheep Aviation. A hangar, fuel tanks, docks, and an office are located on this site. Fuel sales and plane parking are public service requirements of the lease. Just south of the lot, there is a public plane/boat launch and an informal parking area.

Further south there is a second hub for float plane use clustered around a small road pull-out. There are several dock permit sites at this location and parking for dock users. Alpine Aviation operates out of a small trailer parked at the pull-out that is authorized by the City through a temporary use permit.

Where Miles Canyon Road turns up and inland, the City has installed a locked gate across the gravel road running south to deter people from using the area for bush parties and other unregulated activities. Float plane operators with dock sites along the gravel road are given a key to the gate. Also at this location is a gate that crosses Miles Canyon Road which is locked annually from October until April. The section of road past this gate is not maintained in winter months.

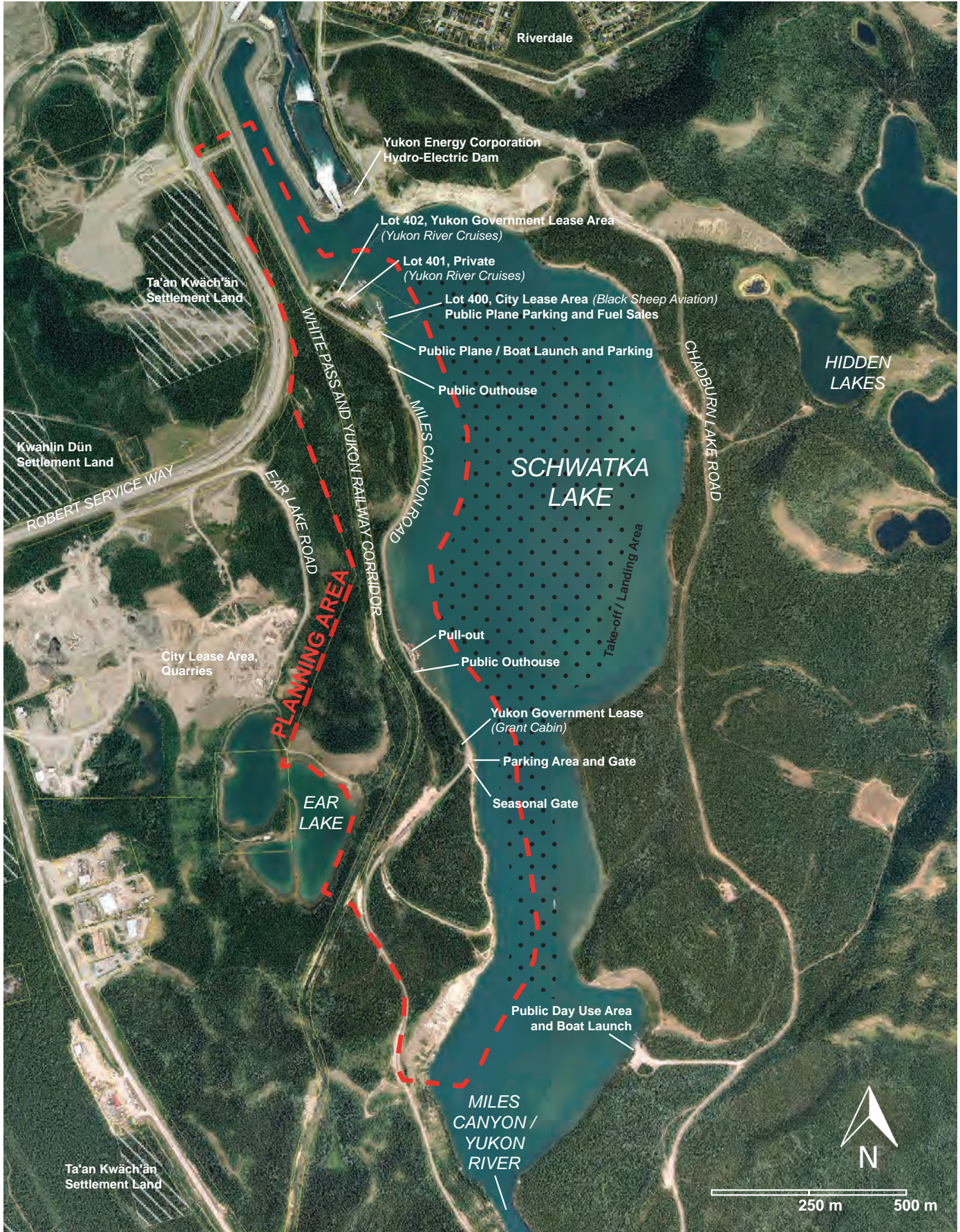
There is a small cabin located in the south end of the planning area belonging to the Grant family. This residential use is permitted by Yukon Government through a life estate lease.

Miles Canyon Road is well-used by residents and visitors. It is a scenic route that attracts walkers, runners, cyclists, and tour buses. The City provides waste facilities and two portable outhouses during the summer months. One outhouse is located near Lot 400 and the other is near the road pull-out.

## 1.5 Float Plane Operations

Schwatka Lake is a water aerodrome registered with Transport Canada. Aircraft operators taking off and landing on the lake are required to check in with the flight control tower at the Erik Nielsen Whitehorse International Airport. Pilots generally use the lake from April to November, with the highest levels of traffic occurring from June through September.

Figure 2 - Planning Area and Current Conditions Map



Aerial: City of Whitehorse 2011

On average, there are over 2,000 flight movements (take-offs and landings) on Schwatka Lake each year. August is the busiest flying month, with up to 20 flight movements per day. Monthly fluctuations in air traffic are related to weather conditions, the economy, and changes in regional mining and exploration activity.

A small number of snow plane pilots use the lake during winter months, with sometimes up to 10 flight movements occurring per month. Para-gliders also use this flight path during the weeks before break-up and are required to contact the control tower beforehand.

As part of this project, float plane management structures in four other jurisdictions were researched. A summary is provided in Appendix 1. Some jurisdictions use a dispersed system similar to the one used in Whitehorse, and others have a centralized hub for float plane activities.

## 1.6 Plans, Bylaws, and Policies

The City has developed several guiding documents that provide direction for the management of Schwatka Lake and its surrounding land uses.

Policy guidance for the area is provided by the **2010 Official Community Plan**. The plan states that the western shore of Schwatka Lake is to be the primary base for float plane activity in Whitehorse. In addition, the plan states that recreational activities such as boating, swimming, and hiking are better suited to the eastern side of the lake.

The City's **2012 Zoning Bylaw** sets out the specific uses allowed in each zone along the lake. There are four zones that currently apply to the planning area. Lots 400, 401, and 402 are zoned PW - Public Waterfront. The shoreline from the plane/boat launch to the pull-out on Miles Canyon Road is zoned PR - Parks and Recreation. The adjacent upland area is zoned PG - Public Greenspace. The south end of the planning area is zoned PE - Environmental Protection.

This is not the first land use plan to be developed for Schwatka Lake. The **1995 Schwatka Lake Aviation and Land Use Study** was completed by Inukshuk Planning and Development Ltd. The planning process was led by a steering committee and included a comprehensive public input program. The purpose of the study was to analyze the

compatibility of multiple land and water uses in the area. The study concluded that float plane activities should not be relocated from the lake and recommended a series of actions for improving float plane management. Some of the recommended actions have been completed and some are no longer valid because conditions have changed.

The **1999 Schwatka Lake Waterfront Policy** sets out regulations pertaining to recreational and commercial aviation and marine operations along the western shore of the lake. The policy specifies dock locations, permit fees, and responsibilities that apply to dock owners. The policy also specifies that no new dock sites should be developed.

The **2004 Watershed Management Plan** sets the direction for managing the City's source water supply for its long-term protection. The plan assesses and prioritizes activities that pose a risk to water quality. It recommends that a focussed study be done to look at possible dock reconfiguration, with a focus on safety and feasibility. Improvements to parking and loading areas, waste collection, and sewage facilities are also recommended. Other proposed strategies include reducing contamination risks from animal feces, restoring the shoreline to minimize erosion, and public education.

A more detailed summary of these documents can be found in Appendix 2. Revisions are proposed in Section 5.



Aerial view of Lots 400, 401, and 402 near the hydro-electric dam

*Photo Credit: Alistair Maitland*



## 2. Planning Process

The planning process for the Schwatka Lake Area Plan got underway in fall of 2013. Opportunities for public involvement included two online surveys, two workshops, and a three month comment period on the first Draft of the Plan. Urban Systems and staff from the City's Planning Services Department took the lead on this project. Staff from the Engineering Services, Bylaw Services, and Parks and Trails Departments were consulted at key points during the process.

### 2.1 Public Survey

A public survey was developed to collect information on how people currently use the Schwatka Lake area, views on the expansion of aviation services, and ideas for other potential future uses. The survey was available online from October 21 until November 5, 2013 and was completed by 333 people.

Given the nature of the responses, it was clear that many of the survey respondents are float plane pilots who use Schwatka Lake while travelling through the region, often between Alaska and points south. For this reason, many of the comments received were related to improving services for itinerant pilots.

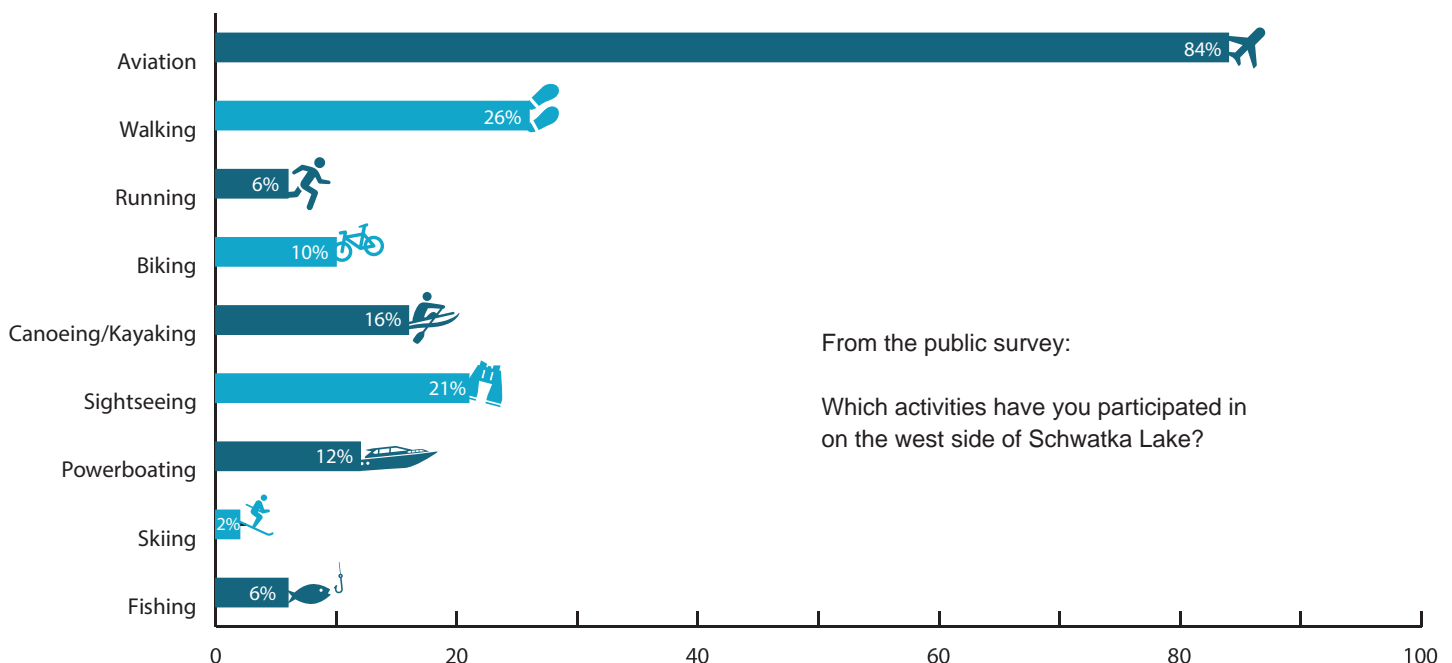
Most of the respondents (nearly 84%) reported using the area for aviation. Over 90% of respondents said they would like to see the construction of a public float plane dock to provide services to local and itinerant pilots. Nearly 95% of respondents thought that the City should allow more float plane docks to be developed in the area.

### 2.2 Public Workshop #1

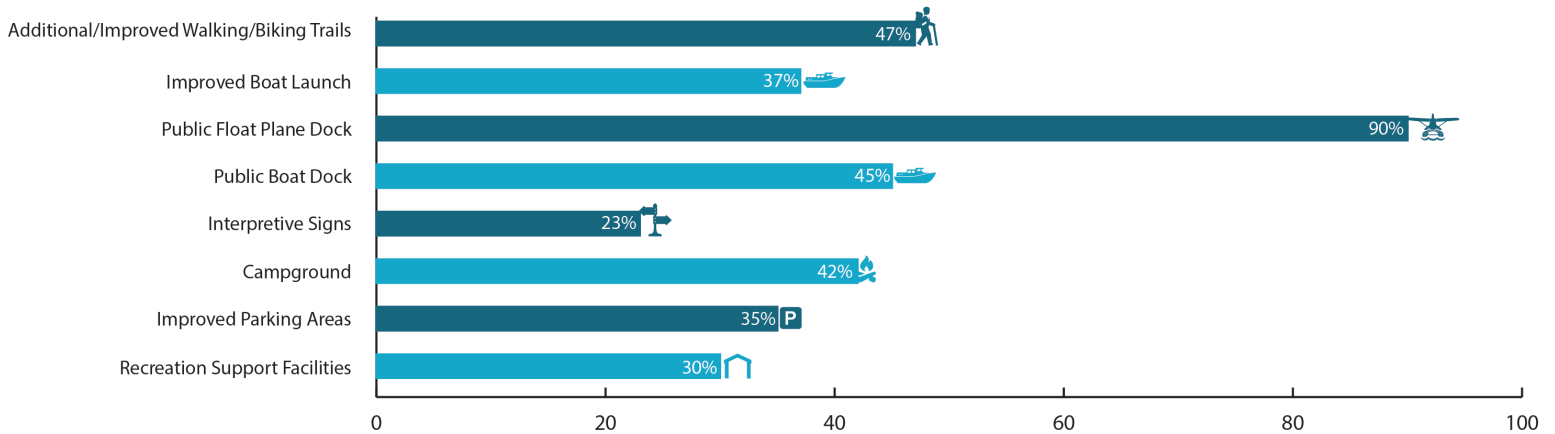
The first workshop was held on November 7, 2013 at the Mount McIntyre Recreation Centre and 29 people attended. Participants represented a variety of interests including aviation, recreation, energy, tourism, and environmental conservation. At this meeting the project and team were introduced, the planning context was presented, and the results of the public survey were summarized.

Participants were divided into small groups. Discussions were facilitated to identify assets and challenges in the area, and to discuss the vision for the lake currently set out in the Official Community Plan.

The assets and challenges identified at the workshop by participants can be found in Section 3.



Which of the following uses and activities do you feel are appropriate for the area?



## 2.3 Development of Draft Plan Options

Several draft land use options were developed based on the input received at the initial workshop, results of the public survey, and meetings with City departments. These land use options were designed for discussion purposes and to test a range of planning ideas. Options showed new parking areas, additional permitted docks, recreation facilities, and potential lease areas.

## 2.4 Public Workshop #2

A second workshop was held on February 25, 2014 at the Mount McIntyre Recreation Centre. The purpose of this workshop was to bring together stakeholders and interested members of the public to discuss the proposed planning options. Thirty-four people participated in the meeting. A survey about the planning options was completed by 35 people.

Overall, participants were interested in seeing a balance between the needs of float plane operators, recreation uses, and environmental protection. There was general support for adding more float plane dock spaces, improving parking, and adding a public non-motorized boat dock in the area south of the gate, next to the gravel road.

## 2.5 Draft and Final Plan

Based on the input received during and after the second workshop, and discussions with City Departments, a Draft of

the Schwatka Lake Area Plan was developed. This Draft Plan was presented to the City's Development Review Committee, Senior Management, and City Council.

An open house was held on June 26, 2014 to gather public feedback on the Draft Plan. Approximately 20 people attended this meeting. A comment period was held until September 1, during which 47 written submissions were received. Comments about the Draft Plan were mixed and many suggestions were received outlining how it could be improved.

Revisions were made to the Draft Plan in February 2015. On March 9, City Council voted to adopt the Plan as a guiding document for future planning and budget decisions.



Public workshop, November 2013

Photo Credit: City of Whitehorse

## 3. Assets, Challenges, and Development

The following list of assets and challenges was compiled based on the discussions held at the first public workshop in November 2013. Understanding the area's assets gives an indication of what people value and which future activities people will support. The challenges highlight where solutions need to be found. In some cases, elements identified in the sections below are contradictory; this reflects the diverse views of the workshop participants.

### 3.1 Assets

#### General

- Schwatka Lake is centrally located in Whitehorse, is close to Downtown, and has a northern feel that both residents and visitors enjoy.
- The energy infrastructure is a key component of Yukon's energy grid.
- The Schwatka Lake area has beautiful scenery and is a popular destination for sight-seeing and recreation.

#### Aviation

- Schwatka Lake is the best local option for float planes because it is central, the ice melts early, and it is not too close to residences. It also has good altitude and length, satisfactory facilities, and constant water level.
- Schwatka Lake is an important stop for transient planes travelling through the region and en route to Alaska.
- There is space to expand float plane uses.

#### Recreation

- Miles Canyon Road is good for walking, running, and cycling.
- The southwest shore is good for early season paddling.
- Ear Lake has existing trails and nice beaches for swimming.
- The shores of Schwatka Lake offer excellent bird and wildlife viewing opportunities.
- A wide range of recreation opportunities exist including motorized and non-motorized boating, swimming, water-skiing, kite-skiing, and cross-country skiing.
- The public launch near Black Sheep Aviation provides boaters with a good alternative to the Schwatka Lake Day Use Area.

- The trail network can be expanded to connect to other existing trails.

#### Infrastructure

- Miles Canyon Road is narrow and winding, which provides natural traffic calming.
- The gate across the gravel road where Miles Canyon turns inland has decreased vandalism and bush parties in the area.

#### Environment

- Schwatka Lake provides bird, fish, and other wildlife habitat.
- Local wetlands help to protect drinking water quality.

### 3.2 Challenges

#### General

- Schwatka Lake is a multi-use area, with potential for dangerous conflicts (especially between float planes and boats).
- There is limited developable space along the shore due to narrow road shoulders and steep uplands.
- Development opportunities are limited because of requirements to protect environmentally sensitive areas and water quality.



Runners on Miles Canyon Road

*Photo Credit: City of Whitehorse*

- Development must be balanced so that float plane operations can continue on the lake.
- Lake etiquette is not respected by all users and more signage is needed.
- Vandalism and bush parties are a problem, especially during the off-season.
- The zoning provides limited commercial opportunities and may need to be updated.
- The lake is a community asset that is under-used.

#### **Aviation**

- There are limited facilities for visiting pilots (e.g. food, power, water, fueling, bathrooms, overnight facilities, phone, and public dock space).
- Float planes sometimes fly over Riverdale and some residents find the noise levels high.
- There is a wait list for float plane dock space. Some permits are held by people who don't have float planes. Permit holders are unwilling to give up their docks because they do not want to end up on the wait list.
- Some dock spaces are sublet without City authorization or proof of liability insurance.
- The dock permit system needs updating.
- There is a perception among some operators that Black Sheep Aviation is not fulfilling the public service obligations set in the lease for lot 400, and that there is a lack of communication about the public services provided.
- There is a perception that Alpine Aviation has a lease agreement allowing for a year-round building on the road pull-out.
- The northern portion of the lake is difficult to use for float planes because it is too close to the dam and trees, and vegetation can accumulate in the area.
- Design standards are needed for docks.
- The parking area around the public plane/boat launch is disorganized and can be congested on busy days.
- Some docks have limited or no space for parking.
- There is limited space for storage related to float plane operations.
- Abandoned docks make the area look run-down.

#### **Infrastructure**

- The shoulder along Miles Canyon Road is narrow making it difficult for pedestrians and cyclists.
- Miles Canyon Road is only plowed up to the seasonal gate in winter which poses a challenge for year-round activity.
- There are lake level fluctuations and Yukon Energy has no standard means of communicating with the dock users. Fluctuations in the water level can damage docks and planes.
- Improvements are needed to the public plane/boat launch, outhouses, and parking areas.

#### **Recreation**

- Sailing at the south end of lake is difficult because of strong currents.
- Infrastructure to support tourism is lacking.
- The location of the existing public plane/boat launch is problematic.

#### **Environment**

- Road contaminants from vehicles can drain into lake (e.g. fuel, anti-freeze, and engine oil).
- There is potential for fuel spills related to fuel storage at dock sites and from boat and plane engines.

### 3.3 Potential Development

- The western shore has potential for expanded commercial uses with possibilities including a public marina, restaurant, and other low impact uses.
- There is space to improve facilities for itinerant pilots.
- The area south of the gate along the gravel road has the potential to be developed for additional parking and float plane docks, an expanded trail network, and a day use area.
- There is space for additional float plane docks and more parking nodes.

## 4. Schwatka Lake Area Plan

The Schwatka Lake Future Land Use Concept is shown in Figure 3 (next page). Each element of the concept and the recommended actions are explained in this section. Recommendations are prioritized in the Implementation Schedule found in Section 6.

### 4.1 Overview

The 1995 Schwatka Lake Aviation and Land Use Study evaluated several options for alternate sites for the City's float plane base. The study determined that Schwatka Lake is the best place for the base due to its central location, early ice break-up, and relatively long flying season.

There is the perception of conflict between float plane pilots and other users of the lake, however diverse activities and uses have existed side-by-side for over 50 years without major incident.

Environmental protection is important along Schwatka Lake since this area contains important wildlife habitat and serves as the City's back-up drinking water supply.

Through this planning process the following priorities have been identified for the area:

- adding spaces for new permitted float plane docks;
- developing services for itinerant pilots;
- improving opportunities for recreation (especially for walking, biking, and non-motorized boating);
- developing low impact commercial/tourism opportunities;
- protecting water quality; and
- protecting wildlife habitat.

The proposed Land Use Concept attempts to balance these diverse priorities for the area. The following guiding principles have been developed from the discussions held at the public workshops:

- Schwatka Lake is a shared resource and should be managed accordingly;
- new development in the area should have a light footprint; and
- new and existing uses should be planned and managed in a manner that does not hinder operations of the hydro-electric dam and the float plane base.

### 4.2 Land Management

Yukon Government and the City both own land within the planning area. The majority of land is owned by Yukon Government. The City owns Lot 400 and is responsible for the maintenance of Miles Canyon Road. The City is also responsible for parking areas and dock sites that rest within the road right-of-way. Land is leased and permitted by both levels of government under different management structures.

Management of the float plane base would be simplified if the land within the planning area, between the White Pass and Yukon Route railway corridor and Schwatka Lake, was transferred to the City. An official survey of the land will be required before the City can submit a request for title.

**Recommendation 1:** Request that the land within the planning area, between the White Pass and Yukon Route railway corridor and Schwatka Lake, be transferred from Yukon Government to the City of Whitehorse.

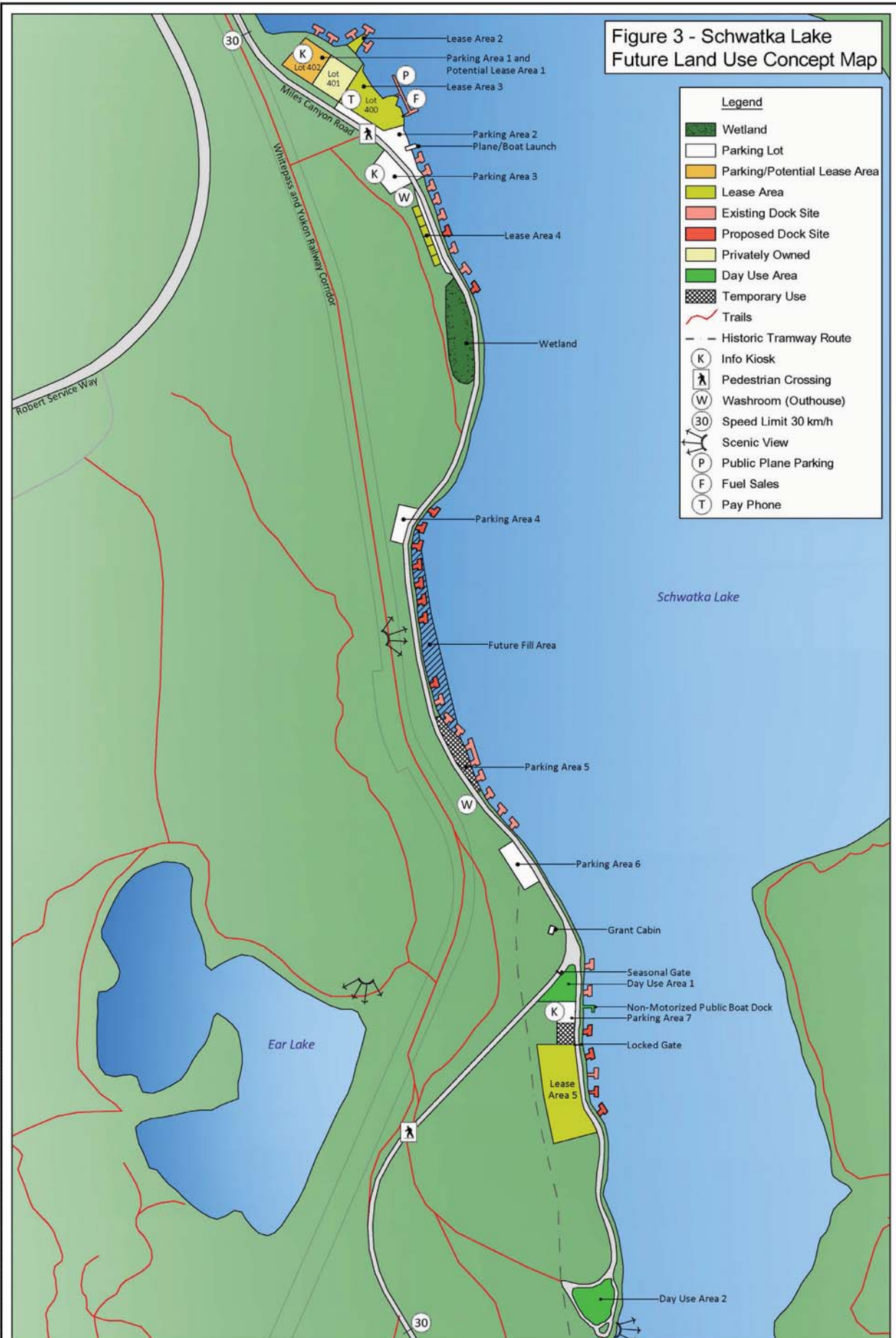
### 4.3 Lease Areas

The Future Land Use Concept proposes a total of three new commercial and storage lease areas to support aviation, tourism, and recreation activities.

Throughout the consultation process, stakeholders identified the need to provide better services for pilots passing through the area. Specific services that are needed include access to secure parking for planes, aviation fuel, washrooms, wireless internet, surface transportation, information kiosks, and a public pay phone. New lease areas will allow space for local businesses to provide services for itinerant pilots.

New lease areas should be allocated fairly. For larger areas, a Request for Proposals should be issued and the proposal that best meets the vision for the area should be selected. For all leases, priority should be given to businesses that require proximity to Schwatka Lake.

Figure 3 - Schwatka Lake Future Land Use Concept Map



### **Parking/Potential Lease Area 1**

Lot 402 is currently leased by Yukon Government to Yukon River Cruises Ltd. The company uses this lease area for storage and overflow client parking when boat tours are operating from Lot 401. The lease will expire in 2015 which presents an opportunity to re-purpose this lot to meet parking and commercial service needs. A two-phased approach is recommended.

In the short term, Lot 402 should be developed for public parking to relieve the congestion experienced at the nearby plane/boat launch. Yukon River Cruises would be able to continue to use the lot for overflow parking, just not to the company's exclusive use.

The two operators with docks and sheds on the adjacent shore would be able to remain at their locations during the parking phase of this lot. When land is transferred to the City, these sites should be integrated into the permit system that applies along Miles Canyon Road. This will provide a more consistent approach to dock management in the area.

In the long term, Lot 402 should transition into a commercial lease site to provide additional presence and services in the north end of the planning area. This phase should not occur until upgrades to Miles Canyon Road are complete and a new parking area is developed across from the launch (see Sections 4.7 and 4.8).

The gravel road that runs diagonally through the lot will need to be realigned along the property boundary. A new access point should be coordinated during road improvements.

The dock sites adjacent to the commercial lease would be reserved for the lease holder. The City will need to work with dock occupants to either take on the commercial lease or identify alternative locations for their docks and storage.

Proposed allowable uses for the site are:

- public parking;
- mobile food vendors;
- float plane operations (buildings, storage, and parking);
- aviation fuel sales; and
- outdoor recreation equipment rentals/sales.

### **Lease Area 2**

No changes are proposed to the Yukon Government water lot lease that rests adjacent to Lot 401. The water lot is used for parking and docks. The lease holder (Yukon River Cruises) may wish to explore the potential of this lease area for commercial dock rentals and long-term itinerant plane parking.

### **Lease Area 3**

Lot 400 should continue to be leased by the City to support float plane operations. The public service requirements of this lot should continue to apply so that aviation fuel and public plane docking remain available to itinerant pilots. The City should work with the current tenant to ensure that services are advertised on the City and tenant websites, as well as through the Water Aerodrome Supplement published annually by Nav Canada. The City should also work with the tenant and Northwestel to have a public pay phone installed at the site.

Current and continued uses:

- float plane operations (buildings, storage, and parking);
- public plane parking; and
- aviation fuel sales.

### **Lease Area 4**

Currently there are several small storage buildings located next to Miles Canyon Road that are unauthorized and non-conforming. There are also unauthorized float planes stored in the road right-of-way.



Planes stored beside Miles Canyon Road, in front of Lot 400

*Photo Credit: City of Whitehorse*

The creation of several small lease areas will respond to the need of float plane operators for temporary buildings for storage and to park planes in the off-season.

Lease Area 4 should consist of six lots approximately 10 by 14 metres. These lots would be leased for float plane related uses that could include:

- vehicle parking;
- float plane storage; and
- storage buildings.

Development standards will be required to ensure that the area does not look run-down.

The City should survey these lease areas, clear vegetation, and develop a paved pad. Lease areas should be developed at the same time as improvements to Miles Canyon Road for cost efficiency and to coordinate access points.

Pedestrian crossing between the storage area and docks is a safety concern, but can be addressed by reducing the speed limit on Miles Canyon Road to 30 kilometres per hour (see Section 4.7).

Storage leases should be for three years and priority should be given to pilots who hold business licences associated with aviation on Schwatka Lake.

#### **Lease Area 5**

Located in the south end, Lease Area 5 would be developed for commercial recreation and tourism uses. The gate would be moved to the northern boundary of the lease area to facilitate access. A parking area would also be developed, which is described in Section 4.8.

Potential uses for this lease include:

- outdoor recreation equipment rentals and sales;
- low impact tourism/recreation activities; and
- mobile food vendors.

If this lease area is developed, improvements will need to be made to ensure that the gravel road does not erode further.

#### **Other Potential Lease Area**

The privately owned Lot 401 is currently listed for sale. If funds become available in the future, the City may wish to consider purchasing this lot. This would give the City more control over the area and would provide space to create a new commercial lease to support float plane operations.



View of docks and planes at the Miles Canyon Road pull-out

*Photo Credit: City of Whitehorse*

**Recommendation 2:** Create Lease Area 1 and develop a process so that the lease is allocated fairly.

**Recommendation 3:** Work with the tenant of Lot 400 and Northwestel to install a public pay phone.

**Recommendation 4:** Create Lease Areas 4 and 5 and develop a process so that each lease is allocated fairly.

## 4.4 Permitted Float Plane Docks

The Future Land Use Concept supports the continued use of the western shore for aviation purposes. The City permits 18 dock spaces along Miles Canyon Road, south of Lot 400. There are currently 16 pilots on the wait list for a dock site.



### **New Dock Permit Sites**

During consultation there was support for increasing the number of float plane dock sites available for recreational and commercial use. New dock spaces should be added so that the total number of City permit sites is 32 (excluding docks within lease areas). This number will provide a dock site for nearly everyone on the wait list, while leaving space along the shore for other uses.

The general locations of new permit sites are shown on the Future Land Use Concept in Figure 3 (page 10). Actual locations should be selected in collaboration with float plane operators, and should be in areas where erosion will be minimal. The minimum separation distance between docks should be 10 metres.

New dock spaces will need to be phased in over time and should be developed in conjunction with new parking areas. All permit sites, new and existing, should be marked with a numbered sign post.

### **Changes to the Permitting Process**

Currently float plane operators pay \$75 a year for their dock permits. It is recommended that the City increase this fee to \$300 to help pay for improvements and management of the area.

In addition to the permit fee, a deposit of \$1,500 should be required for each dock site. The deposit reflects the cost of recovering and disposing of a dock if it were to float into the hydro-electric dam, or be abandoned after use.

A detailed permit application form for dock sites should be developed by the City to clarify the process. Each permit holder should have a plane registered in their name and should be required to provide registration information. This will help to decrease the number of docks permitted to people without float planes.

Permits should allow for docks to be shared by up to two pilots, provided that plane registration and insurance information for both operators is provided.

The expiration of dock permits occurs on October 31 of each year. This date should be changed to April 1 to better align with the start of the spring aviation season.

For environmental protection, permits should require float plane operators to keep a fuel spill kit.

### **Permit Information Package**

The City should develop an information package for permit holders that describes dock standards, erosion controls, and safety considerations for the area. This information should be handed out during the dock permitting process.

### **Dock Standards**

Standards should be developed that describe and illustrate acceptable designs and dimensions for docks. This could include a minimum clearance above the water for decking and standards for the integrity of styrofoam and other float material. Standards should also be set for how docks are secured to the shore so that disturbance and erosion are minimized.

**Recommendation 5:** Increase the dock permit fee to \$300 and initiate a \$1,500 deposit requirement.

**Recommendation 6:** Develop a permit information package that includes details about dock standards, erosion controls, and safety.

**Recommendation 7:** Identify new dock spaces to bring the total number of permit sites to 32 (not including docks within lease areas).

**Recommendation 8:** Add a sign post indicating the dock number at each permit site.

**Recommendation 9:** Allow for up to two operators to share each dock site.

## **4.5 Communications**

Discussions with local and itinerant pilots revealed that information for the Schwatka Lake water aerodrome is lacking on the internet. The City should develop a web page dedicated specifically to the aerodrome. Information could also be provided through the Canadian Owners and Pilots Association website.

Submitting regular updates to Nav Canada for the annual Water Aerodrome Supplement will additionally help pilots by providing current information on facilities, public plane parking, fuel availability, and potential hazards during the implementation of this Plan.

**Recommendation 10:** Create a page on the City website dedicated to aerodrome information.



Public plane/boat launch near Lot 400

*Photo Credit: City of Whitehorse*

## 4.6 Plane/Boat Launch

The existing plane/boat launch just south of Lot 400 is the only launch on the west side of the lake. The launch is in poor repair and is nearly unusable. The launch should be reconstructed and relocated several metres to the south to provide a buffer between the launch and the Black Sheep Aviation dock. The surrounding parking should be improved as described in Section 4.8.

Signs indicating that the area is shared by planes and boats and identifying a low-wake zone should be installed. The typical speed limit for a low-wake zone is 10 kilometres per hour within 30 metres of shore.

**Recommendation 11:** Reconstruct the plane/boat launch south of its current location.

## 4.7 Miles Canyon Road

Miles Canyon Road is in considerable need of repair due to wear and potholes. The road is well-used by walkers, runners, cyclists, and sight-seers and will become busier as the area develops.

The road width is approximately 8.5 metres, with narrow shoulders in some sections. Opportunities for widening the road are limited due to topography, proximity to the lake,

and expense. City improvements in the short term should be focussed on improving this shared road through traffic calming, better signage, and regular maintenance.

To make the area safer, the speed limit should be reduced from 50 to 30 kilometres per hour from the hydro-electric dam spill-way to where Miles Canyon Road meets the rail corridor in the south end. An amendment to the City's Traffic Bylaw will be required to implement this change.

Additional traffic calming strategies should be implemented in areas with the highest pedestrian traffic. This includes the trail head across from Lot 400 and where the Yukon River Trail Marathon route crosses Miles Canyon Road in the south end (see Appendix 3 for the marathon route).

In the long term, Miles Canyon Road will need to be re-constructed. A comprehensive design should be developed that incorporates safety improvements and identifies access points to new parking, lease, and day use areas. In some sections of the road there may be space to widen the gravel shoulder or add bike lanes. In other sections, the road should be marked as a shared roadway.

**Recommendation 12:** Implement a traffic calming program along Miles Canyon Road that includes zebra stripe crossings and pedestrian signage at all trail crossings.



Runners on Miles Canyon Road

*Photo Credit: City of Whitehorse*

**Recommendation 13:** Reduce the speed limit to 30 kilometres per hour from the hydro-electric dam spill-way in the north to where Miles Canyon Road meets the rail corridor in the south.

**Recommendation 14:** Develop a comprehensive design for Miles Canyon Road that includes improvements for cyclists and pedestrians, new parking areas, and access to new lease and day use areas.

**Recommendation 15:** Carry out improvements to Miles Canyon Road, including repaving the road surface, developing parking areas, and adding road shoulders where possible.

## 4.8 Parking Areas

Additional off-street parking is needed at several key locations along Miles Canyon Road. Parking Areas 1 through 5 and 7 should be prioritized. Parking Area 6 should only be developed in the future, if needed. Parking areas provide a good location for signs reminding people that the lake is a multi-use water body shared by float plane pilots, boaters, and other users.

### **Parking/Potential Lease Area 1**

The transitional use of Lot 402 is described in Section 4.3. In the short term, the plan is to develop this site for public parking to relieve congestion at the plane/boat launch. Since this site is close to the trail head across from Lot 400, this will be a good location to add informational signs and maps of the local trail system. When Parking Area 3 is developed across from the launch, Lot 402 should transition into a commercial lease area.

### **Parking Area 2**

The area next to the plane/boat launch is used for parking, but because there is no signage or delineation between spaces and driving lanes, it is disorganized and mis-used. Developing this site into an organized parking lot will increase the number of available parking spaces and will make the area safer.

Concrete blocks with suspended wood beams can be used for delineation. Vegetated strips and planter boxes can also be used and would help to improve the look of this site.

Identifying an area for trailers will make this site easier to use. Parallel parking in the right-of-way in front of Lot 400 should also be developed to provide easy pull-through spaces for vehicles with trailers.

### **Parking Area 3**

To accommodate overflow parking from the public plane/boat launch, a new parking area should be developed on the west side of Miles Canyon Road. This parking area should have at least ten spaces for cars, including four pull-through spaces for vehicles with trailers. Clearing of vegetation will be required to develop this site.

### **Parking Area 4**

A small parking area will need to be developed to accompany new dock spaces created in the bay area. A level site exists on the west side of Miles Canyon Road, which could be cleared to accommodate approximately eight parking spaces.

### **Parking Area 5**

Parking Area 5 is located on the pull-out of Miles Canyon Road. Operators use the pull-out while accessing the seven dock permit sites clustered at this location. Alpine Aviation keeps a small office trailer parked at the site from which the company operates a tourism flying business. Parking in this area can be congested on busy summer days.



Parking Area 2 next to the public plane/boat launch

*Photo Credit: City of Whitehorse*

Temporary buildings and storage should be allowed to continue at the pull-out. Signage should be added to better manage parking and waste facilities are also needed. When the City carries out improvements to Miles Canyon Road, the pull-out should be resurfaced to protect it from erosion.

This is a good location for business operators, but space is limited. In the future, the City should consider adding fill to expand the pull-out to provide more space for parking and commercial uses.

#### **Parking Area 6**

A small parking node could be developed in the flat area south of the pull-out, on the west side of Miles Canyon Road. This area could accommodate approximately eight parking spaces. This is a low priority site that should only be developed if nearby parking conditions become more congested. A vegetated buffer should be retained to separate and screen parking from the nearby cabin.

#### **Parking Area 7**

A parking node for approximately eight vehicles should be developed in the south end of the planning area. For this to work, the gate must be moved south from its current location so that the parking area is accessible. There should be enough space in this parking area to accommodate a limited amount of temporary storage related to aviation and recreational uses.

**Recommendation 16:** Develop public parking at Parking Area 1.

**Recommendation 17:** Reorganize and improve existing parking in Parking Areas 2 and 5.

**Recommendation 18:** Develop Parking Areas 3, 4, and 7 in conjunction with improvements to Miles Canyon Road.

**Recommendation 19:** Develop Parking Area 6, if needed.

## 4.9 Environmental Protection

Schwatka Lake is the City's back-up drinking water source and is also an important habitat area for wildlife. Development within this area should be carefully designed and constructed to avoid negative environmental impacts.



Wetland beside Miles Canyon Road

*Photo Credit: City of Whitehorse*

Environmental protection measures should include:

- drainage management;
- fuel spill kit requirement as part of the dock permitting process;
- doggie bag dispensers at trail entrances;
- bank stabilization and revegetation to minimize erosion;
- interpretive signage highlighting local wildlife;
- restriction on septic fields; and
- protection for the small wetland area on the west side of Miles Canyon Road.

All development should be planned and built to ensure that drainage is carefully managed and run-off into the lake is minimized. The City's 2004 Watershed Management Plan provides many recommendations about how to manage run-off in the Schwatka Lake area.

New development should include a run-off plan that directs water into bioswales (vegetated ditches with filtering qualities) and infiltration ponds. When Miles Canyon Road and the pull-out are resurfaced, they should be constructed to slope away from the lake. Parking nodes should have permeable surfaces.

Vegetation should be added along the gravel banks of the lake to control erosion. Locations for new dock sites should be carefully selected to minimize erosion and areas for revegetation should be identified at the same time.

Composting toilets, portable outhouses, and sewage pump-out systems should be used for sanitation facilities. Septic fields should continue to be restricted in this riparian area. Sanitation systems should be designed to meet the standards outlined by the Yukon Government Department of Health and Social Services.

**Recommendation 20:** Integrate environmental protection measures into the City's permitting and infrastructure design processes.

**Recommendation 21:** Protect the small wetland on west side of Miles Canyon Road by adding vegetation and preventing run-off from entering the wetland.

**Recommendation 22:** Revegetate and stabilize the shoreline to reduce erosion, especially in high traffic areas.

## 4.10 Trails

Miles Canyon Road and the surrounding trails are popular with walkers, hikers, and cyclists. There are formal (signed) and informal trails throughout the area. The White Pass and Yukon Route railway corridor is used to connect some trails. The Yukon River Trail Marathon is an annual event that takes place each summer, with runners following a route that extends through the planning area (see Appendix 3 for the route map).

Signage would make the trail network easier to use. An overview map should be located at Parking Area 1 and wayfinding signs should be placed at key trail access points and junctions.

Trail work in this area should be focussed on enhancing existing trails rather than building new ones. The following improvements are recommended:

- enhance trails that connect to Ear Lake;
- improve the connection and signage to Miles Canyon trails;

- improve the connection and signage to the Millennium Trail; and
- consider a Yukon River Trail that follows the shoreline as closely as possible.

The City should update its Guide to Popular Trails In Whitehorse and work with Yukon Government to revise the Enjoying Whitehorse Trails booklet to ensure that the information is current and accurate.

**Recommendation 23:** Develop wayfinding signs and maps to place at trail heads and in Parking Area 1.

**Recommendation 24:** Strengthen trail connections to Ear Lake, north to the Millennium Trail, and south to Miles Canyon.

**Recommendation 25:** Update relevant trail maps and booklets.



Schwatka Lake area trail leading to Ear Lake

*Photo Credit: City of Whitehorse*

## 4.11 Day Use Areas

The western shore of Schwatka Lake has become more popular as a recreation area. Adding two small day use areas will enhance this area for both residents and visitors.

### Day Use Area 1

The area just south of the existing gate along the gravel road could be developed for day use purposes. Picnic tables, outhouses, and a covered picnic shelter will serve those visiting the area for walking, boating, biking, sight-seeing, and wildlife viewing. This would also be a good location for interpretive signs. The associated Parking Area 7 could be used for temporary storage related to recreation.

### Day Use Area 2

If Lease Area 5 is developed and there are more legitimate uses and activities in the area, a second day use area could be developed at the south end of the gravel road. This area is popular with local bird watchers and could have picnic tables, outhouses, viewing platforms, and interpretive panels.

**Recommendation 26:** Develop Day Use Area 1 south of the current gate.

**Recommendation 27:** In the future, once there is development at Lease Area 5, develop a second day use area at the south end of the gravel road.

## 4.12 Non-Motorized Boating

The City should develop a non-motorized public boat launch in the south end of the planning area, across from Day Use Area 1. This is an area that is currently well-used by paddlers because it provides access to Miles Canyon and the Yukon River, and is one of the first local water bodies that is ice free in the spring. This is a good location for a launch because paddlers coming down river would have a spot to pull out before entering the area with the highest float plane traffic.

The launch would need:

- a floating dock with stairs for access;
- a small parking node (described in Section 4.8);
- outhouses; and
- waste facilities.



Bench overlooking Schwatka Lake at south end

*Photo Credit: City of Whitehorse*

During consultation for this Plan, the Yukon Breeze Sailing Society and the Yukon Canoe and Kayak Club expressed interest in using this launch site for sailing and paddling programs. Due to safety concerns it was decided that the western shore is more suited to casual boating use, whereas the eastern shore is more appropriate for classes and programs.

**Recommendation 28:** Develop a non-motorized boat launch south of the current gate, beside the gravel road.

## 4.13 Ear Lake

Ear Lake, with its nice beaches and relatively warm water, has the potential for increased recreational uses. When quarry activities wind down, there may be the potential to develop Ear Lake and the surrounding area as a recreation destination.

**Recommendation 29:** Develop a plan for improved recreation around Ear Lake, to be implemented when quarry use winds down.

## 4.14 Signage

Signage throughout the planning area needs to be replaced due to weathering and vandalism. There are also locations where new signage could be added to provide information on amenities and hazards. The City should consult with Yukon Government, recreation groups, pilots, and conservationists to coordinate messaging and confirm sign locations.

Types of signs needed are:

- notice board for the Schwatka Lake community of users to share information on lake level fluctuations, announcements, and contact information;
- sign at Lot 400 identifying that public plane parking is available at the dock;
- speed limit signs for Miles Canyon Road;
- low-wake zone sign near the plane/boat launch;
- maps and directional signs for trails;
- water quality protection signs;
- interpretive signs about wildlife and heritage;
- signs about float planes and safety; and
- signs indicating that the road is shared between cyclists, motorists, and pedestrians.

**Recommendation 30:** Work with Yukon Energy Corporation, Yukon Government Historic Sites Unit, Yukon Conservation Society, pilots, and other groups to develop and implement a signage plan.

## 4.15 Residential Uses

There are currently two buildings in the planning area that include residential uses. There is a caretaker suite on Lot 401 used by Yukon River Cruises, which should be allowed to continue. This limited use provides a sense presence and security in the north end of the planning area.

The second residential use is the Grant Cabin located just south of the road pull-out. The building is listed on the City's Heritage Registry as an un-designated heritage resource and is permitted by Yukon Government through a life estate lease. The future use of this site should be the result of discussions with the lease holder and both governments.

## 4.16 Heritage

The historic Hepburn Tramway was built along the west side of the Yukon River in 1898. The tram was used to portage goods around the perilous White Horse rapids during the Klondike Gold Rush. Today, hiking trails and segments of Miles Canyon Road intersect with and follow portions of the route. In other areas, the route runs under Schwatka Lake.

The heritage values of this historic route should be assessed before improvements occur in the south end of the planning area.

**Recommendation 31:** Assess the heritage values associated with the historic Hepburn tramway route.

## 4.17 White Pass and Yukon Route Corridor

The White Pass and Yukon Route currently has no plans to either sell the railway corridor or use it as a train route. If there is ever an opportunity for the train to run through this area, it would be a benefit and would help it to become even more of a key tourist destination.



People walking along the historic Hepburn Tramway

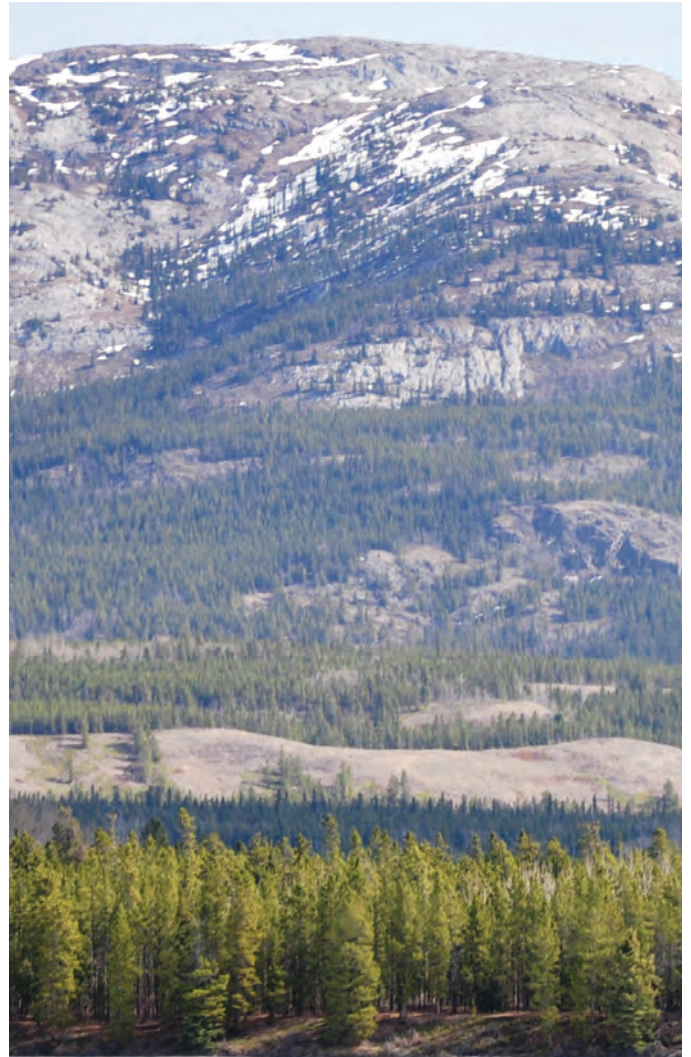
*Photo Credit: MacBride Museum of Yukon History collection, 1989-3-1-344*

## 4.18 Working Group

In order for this Plan to become a reality, it needs to have champions. A good approach for implementing the Plan's recommendations would be to form a small working group made up of City and Yukon Government staff, as well as representatives from motorized and non-motorized recreation groups, local and itinerant pilot associations, and trail users.

Even with this working group in place it will be necessary to meet with other user groups periodically to discuss the implementation of this Plan and other issues that arise.

**Recommendation 32:** Establish a working group to implement the Schwatka Lake Area Plan.



View from Miles Canyon Road

*Photo Credit: Daniele Mitaine*



## 5. Updates to Plans, Bylaws, and Policies

This section outlines changes that will need to be made to City plans, bylaws, and policies in order to implement this Area Plan. Appendix 2 provides a summary of these documents.

### 5.1 Official Community Plan

Section 15.3 of the City's Official Community Plan sets out a vision for the Schwatka Lake float plane base. The vision should be amended to allow for the development of limited recreational facilities on the west shore for the enjoyment of residents and visitors.

The vision should recognize that excellent hiking and walking opportunities exist on the west side of the lake. It should state that improvements to recreational facilities should be well-planned and managed to limit their impact on float plane and energy operations. The vision should also reflect the need to provide services for itinerant pilots and recognize the area's potential as a tourist destination.

The following updates are recommended for Policy 15.3.1, which addresses the consolidation of activities and restriction on new dock spaces:

- reflect that Schwatka Lake is the only (rather than primary) base for float plane activity in Whitehorse;
- allow for the development of additional dock sites;
- consider removing the sentence about a marina for pleasure boats; and
- change wording so the focus is not on a single activity node.

The City should consider expanding this section to provide guidance for the lake, not just the west shore.

**Recommendation 33:** Update Section 15.3 of the Official Community Plan.

### 5.2 Zoning Bylaw

There are four different zones within the study area: PW - Public Waterfront, PR - Parks and Recreation, PE - Environmental Protection, and PG - Greenbelt. In the short term, the PR zone should be extended south to encompass

all docks, both existing and proposed. Other zoning changes should be considered when development plans are known.

**Recommendation 34:** Update the Zoning Bylaw.

### 5.3 Schwatka Lake Waterfront Policy

The City's Schwatka Lake Waterfront Policy will need to be updated. Specific changes should reflect Section 4.4 of this Plan to:

- require that float plane registration information be provided as part of the permit application;
- allow for new dock sites;
- allow for the sharing of docks by up to two pilots;
- require that dock owners have a fuel spill kit;
- set April 1 as the annual expiration date for permits; and
- revise the policy's Attachment A to indicated the location of existing and proposed dock sites.

**Recommendation 35:** Update the Schwatka Lake Waterfront Policy.

### 5.4 Fees and Charges Bylaw

The fee increase and new deposit requirement for dock permits will need to be implemented through amendments to the City's Fees and Charges Bylaw. Changes to the bylaw are to:

- increase the dock permit fee to \$300; and
- initiate the \$1,500 deposit requirement.

**Recommendation 36:** Amend the Fees and Charges Bylaw.

### 5.5 Traffic Bylaw

To reduce the speed limit on Miles Canyon Road from 50 to 30 kilometres per hour, as outlined in Section 4.7, the City will need to amend the Traffic Bylaw.

**Recommendation 37:** Amend the Traffic Bylaw.

## 6. Implementation Schedule

The table below summarizes the implementation items that are listed and explained in Sections 4 and 5 of this Plan. The corresponding recommendations are indicated in brackets.

Short term recommendations should be completed in the next four years. Medium term recommendations should be completed in five to seven years. Long term recommendations should be completed in eight to ten years.

Improvements to Miles Canyon Road and the development of

new parking areas will need to precede other improvements, such as the development of commercial lease areas and new dock sites. For cost efficiency, it makes sense to develop the parking, lease, and day use areas in tandem with road improvements through a comprehensive design process.

Approval of funds through the City's budgeting process will be needed before major improvements can occur. The City should explore external funding opportunities that focus on economic development and tourism.

Short Term 1 to 4 Years
Action
Update the Official Community Plan (#33)
Update the Zoning Bylaw (#34)
Update the Schwatka Lake Waterfront Policy (#35)
Update the Fees and Charges Bylaw (#36)
Update the Traffic Bylaw (#37)
Establish the Schwatka Lake Working Group (#32)
Create a page on the City's website dedicated to water aerodrome information (#10)
Develop a dock permit information package and application form (#6)
Increase the dock permit fee to \$300/year and require a \$1,500 deposit (#5)
Allow up to two pilots to share each dock site (#9)
Add a sign post with an identification number at each dock site (#8)
Reduce the speed limit to 30 kilometres per hour along Miles Canyon Road (#13)
Implement traffic calming along Miles Canyon Road (#12)
Improve the plane/boat launch south of Lot 400 for use by pilots and boaters (#11)
Work with the tenant and Northwestel to install a pay phone at Lot 400 (#3)
Develop and implement a signage plan (#30)
Add wayfinding signs and maps at trail heads and in Parking Area 1 (#23)
Strengthen trail connections (#24)
Update trail maps and booklets (#25)
Request that Yukon Government land in the planning area be transferred to the City (#1)
Develop public parking at Parking Area 1 (#16)
Reorganize and improve Parking Areas 2 and 5 (#17)
Develop a comprehensive design for Miles Canyon Road improvements (#14)
Integrate environmental protection into the City's permitting and infrastructure design processes (#20)
Protect the small wetland by adding vegetation and controlling run-off (#21)
Reduce erosion by revegetating the shoreline (#22)
Assess heritage values associated with the historic Hepburn tramway route (#31)

Medium Term 5 to 7 Years
<b>Action</b>
Create Lease Areas 4 and 5 (#4)
Carry out improvements to Miles Canyon Road (#15)
Develop Parking Areas 3, 4, and 7 in conjunction with improvements to Miles Canyon Road (#18)
Authorize new dock sites, bringing the total number of City permit sites to 32 (#7)
Develop Day Use Area 1 (#26)
Develop non-motorized boat launch and move gate further south (#28)
Long Term 8 to 10 Years
<b>Action</b>
Create Lease Area 1 (#2)
Develop Parking Area 6, if needed (#19)
Develop Day Use Area 2 (#27)
Develop a plan for improved recreation around Ear Lake (#29)



*Photo Credit: Urban Systems*



Gravel road south of Miles Canyon Road

*Photo Credit: City of Whitehorse*

## Appendix 1 - Case Studies

An important aspect of managing the Schwatka Lake area is a successful organizational structure for the float plane base. To help achieve this goal, short interviews were conducted with float plane base managers or personnel at four other float plane bases to determine how they operate.

Float plane bases in the following locations were studied:

- Lake Hood, Anchorage AL
- Yellowknife, NWT
- Seal Cove, Prince Rupert BC
- Nanaimo Harbour, Nanaimo BC

The management structures of these areas varied greatly depending on demand, proximity to urban centres, and adjacent land uses.

### **Management structure:**

There is a full-time manager at the largest case study base (Lake Hood). In smaller float plane bases the management is often taken care of by someone who is already at the base for another reason (i.e. fuel station owner, harbour master). In Yellowknife, there is no organization that oversees management of the float plane base because all the space is privately owned.

### **Space for itinerant planes:**

Most float plane bases have at least four or five spaces for itinerant planes, or they would like to have this number of spaces available.

### **Shared docks:**

None of the bases have a dock sharing policy. They have enough space and do not need to implement dock sharing, or have a long wait list and have implemented regulations to ensure each space is used to the full extent.

### **Regulating dock access/use:**

In Lake Hood, where there is a long wait list, strict rules have been implemented requiring the full use of the dock or slip space. In the other float plane bases there are no wait lists, so docks are available on a first come first serve basis. In Yellowknife, the docks are privately owned, so an arrangement would have to be made with a private owner to access a space.

### **Leases:**

Leases are generally only for larger commercial operations and are fairly long (as short as 5 years, but more often in the 15 to 55 year range).

### **Fuel stations and other services:**

Only half of the float plane bases in the case studies had fueling stations accessible to the public. There were other services only if the base was close to a big city/busy area.

### **Land tenure:**

Usually a float plane base has a use agreement with the state/federal government who has jurisdiction over water. The base can then be subleased to commercial operators, or daily use permits can be issued. Yellowknife is different as all of the land/water that constitutes the float plane base is privately owned by individuals and commercial operators.

### **Typical fees:**

Monthly (\$105) or daily (\$10 to \$15) for a slip/dock space.

### **Dock maintenance:**

Usually maintenance is done by whoever manages the docks/slips. Lease holders and private land owners are responsible for their own docks.

### **Dock additions:**

No float plane bases have plans to add any more docks. Lake Hood may consider it in their new master planning process to address their wait list.

### **Liability insurance:**

Leaseholders (commercial) are always required to have liability insurance. The management of float plane bases also always carries liability insurance. However, most bases have no way to require itinerant planes to be insured. In Yellowknife, it is up to the individual private land owners with docks to decide if they want to have liability insurance.

### **Wait lists:**

Only Lake Hood has a wait list (10 years). As a result there are very specific regulations about who can use the docks/slips and maintain that use. No other float plane base studied has a wait list and many of them have seen a decline in aerodrome use in the last 10 to 15 years.

## Appendix 2 - Summary of Existing Plans

### **Official Community Plan (2010):**

The Official Community Plan (OCP) sets out the long term direction for Schwatka Lake and the surrounding area.

The OCP states the following:

*Schwatka Lake, which is located south of Downtown and east of Robert Service Way, is a multi-use water body created by a hydro-electric dam. The Lake plays a key role in power generation, wildlife habitat, air transportation, tourism, and community recreation. There are several issues surrounding the compatibility of multiple land and water uses. As the lake is the primary base for float plane activity, this use should continue to expand along the west side of the lake. Future development could include improvements to parking areas, further land leases for float plane operators, or reorganization of dock locations to better meet the needs of the industry. Recreational activities such as boating, swimming and hiking, are better suited to the east side of the lake, where the boat launch and day use areas are already located. However, it is important to remember that Schwatka Lake is also the backup drinking water source for the City and water quality should be protected.*

The OCP policies pertaining to Schwatka Lake are:

**15.3.1** Schwatka Lake is the primary base for float plane activity. Dock owners are encouraged to consolidate into a single activity node for float planes on the west side of the lake. This may include a marina, and a docking facility for pleasure boats. Existing docks may be replaced, but new docking facilities are to be prohibited.

**15.3.2** Consideration shall be given to improved operating procedures to ensure that the Schwatka Lake float plane base is maintained in a way to avoid fuel spills. This may involve float plane operators, property owners and the City to collaborate and add protective measures to an overall management plan.

### **Watershed Management Plan (2004):**

The Watershed Management Plan is a set of two reports that were intended to provide information on the status of Schwatka Lake, when the lake was the City's main drinking water supply. The plan assesses and prioritizes activities that pose a risk to water quality and recommends a series of watershed management options.

The recommendations fall into the following themes:

- implementation of additional treatment;
- protection of well-head and ground water recharge areas;
- participation in local area planning exercises;
- increasing protection of the riparian zone;
- riparian zone restoration and mitigation;
- modifying float plane facilities;
- re-visiting country residential planning;
- reducing risks from domesticated animal feces;
- enhancing management of mining activities in the watershed;
- establishing an exclusion zone around the Schwatka Lake intake pipe;
- developing guidance for organized sporting and cultural events near the lake;
- water quality monitoring;
- public education; and
- harmonizing City and Yukon Government in regional planning for source water protection.

The plan recommends that a study be done to look at possible dock reconfiguration strategies, with a focus on safety and feasibility. It recommends that an amalgamation of docks at the northwest corner should not be considered until a focussed study is completed, water quality tests provide a more solid indication of the western shore as a source of contamination, and the water currents are better understood.

In the short term, the plan recommends a number of improvements to parking and loading areas, garbage collection, and sewage facilities. It recommends that the Schwatka Lake Waterfront Policy should be revised and should allow for the replacement or moving of the more southern docks to locations further north, provided that safety is not compromised.

**Schwatka Lake Waterfront Policy (1999):**

The purpose of the Schwatka Lake Waterfront Policy is to assist and regulate individual and commercial aviation and marine operations located on the Schwatka Lake waterfront land.

The policy does the following:

- sets out regulations governing dock permits and the application process;
- outlines the types of uses that are allowed on the shore;
- provides details about parking, dock maintenance, fuel handling, and insurance requirements; and
- prohibits new dock locations from being established.

**Schwatka Lake Aviation and Land Use Study (1995):**

The purpose of the Schwatka Lake Aviation and Land Use Study was to analyze the compatibility of multiple land and water uses on Schwatka Lake. The study concluded that the float planes activities should not be relocated and recommended a series of options for improved float plane management.

The conclusions and recommendations of the study are:

- multiple-use of the lake can continue;
- public supports continued aviation use on the west side of the lake and recreation use on the east side;
- float plane base should be devolved to the City so that the lands are managed by one agency;
- site management problems can be resolved by bringing dock facilities up to standards and improving fuel handling;
- City should provide adequate public washrooms and garbage facilities;
- City should replace the boat launch dock, and gate the road to the party spot to the south;
- spill response plan should be completed in collaboration with City, Transport Canada, and Yukon Energy;
- City should involve float plane operators in the design and layout of improved dock facilities with a permit and lease system;
- individual docks spread along the Miles Canyon Road are favoured;
- City should offer individual dock leases and tender the float base management system;
- City should consider whether the harbour master function should be part of the float base concession; and
- City should post a sign at the public boat launch advising users to watch for aircraft.

# Appendix 3 - Yukon River Trail Marathon Map





